

CLAIMS

What is claimed is:

1. An apparatus comprising:
a functional unit;
a location determination device;
a local policy enforcement device coupled to the location determination device and the functional unit; and
a communication interface coupled to the local policy enforcement device.
2. The apparatus of claim 1 wherein the location determination device comprises a position detection device.
3. The apparatus of claim 2 wherein the position determination device comprises a global positioning system receiver.
4. The apparatus of claim 2 wherein the position determination device comprises an accelerometer.
5. The apparatus of claim 1 wherein the location detection device comprises a motion detection device.
6. The apparatus of claim 1 further comprising:
a user authenticator coupled to the local policy enforcement device.
7. The apparatus of claim 6 wherein the user authenticator comprises a password device.
8. The apparatus of claim 6 wherein the user authenticator comprises a biometric input device.
9. The apparatus of claim 6 wherein the location determination device comprises a global positioning system receiver.

10. The apparatus of claim 6 wherein the location determination device comprises an accelerometer.

11. The apparatus of claim 1 wherein the local policy enforcement device comprises means for determining whether the apparatus is within a distance from a location.

12. The apparatus of claim 11 wherein the distance is a predetermined distance.

13. The apparatus of claim 11 wherein the location is a predetermined location.

14. The apparatus of claim 11 wherein the location is a previously-determined location of the apparatus.

15. The apparatus of claim 14 wherein the distance is a predetermined distance.

16. The apparatus of claim 1 wherein the local policy enforcement device comprises means for dynamically adapting a local policy in response to previous location determinations and previous applications of the local policy.

17. The apparatus of claim 1 wherein the local policy enforcement device comprises means for determining, in response to a determination by the location determination device that the apparatus has been moved to a new location, whether the new location complies with a local policy.

18. The apparatus of claim 17 wherein the local policy is whether the new location is a pre-approved location.

19. The apparatus of claim 17 wherein the local policy is whether the new location is within a distance from a prior location of the apparatus.

20. The apparatus of claim 19 wherein the distance is a predetermined distance.

21. A method of operating an apparatus, the method comprising:
determining a location of the apparatus;
checking whether the location complies with a local policy determined by the apparatus;
if the location complies with the local policy, enabling operation of the apparatus; and
if the location does not comply with the local policy, disabling operation of the apparatus.

22. The method of claim 21 further comprising, if the location does not comply with the local policy:

performing an authentication of a user of the apparatus;
if the user is authenticated, enabling operation of the apparatus; and
if the user is not authenticated, disabling operation of the apparatus.

23. The method of claim 22 further comprising:
communicating to an external agent.

24. The method of claim 23 wherein the communicating comprises providing an indication of the location of the apparatus.

25. The method of claim 24 wherein the communicating further comprises providing data gathered during the authentication of the user.

26. The method of claim 25 wherein the data comprises biometric input data.

27. The method of claim 21 wherein the local policy is whether the location of the apparatus is within a predetermined area.

28. The method of claim 21 wherein the local policy is whether the location of the apparatus is less than a predetermined distance from a prior location.

29. The method of claim 21 wherein the local policy is whether the location of the apparatus is a pre-approved location.

30. The method of claim 21 further comprising:
dynamically adjusting the local policy.

31. A method of operating an apparatus, the method comprising:

(A) performing authentication of an attempted user of the apparatus;

(B) if the user is determined to be not authorized to use the apparatus,

(B.1) disabling the apparatus; and

(C) if the user is determined to be authorized to use the apparatus,

(C.1) determining a location of the apparatus,

(C.2) checking whether the location complies with a local policy administered by the apparatus,

(C.3) if the location complies with the local policy,

(C.3.a) enabling the apparatus, and

(C.4) if the location does not comply with the local policy,

(C.4.a) inquiring of an external agent whether the location complies with a remote policy administered by the external agent,

(C.4.b) if the location complies with the remote policy,

(C.4.b.1) enabling the apparatus, and

(C.4.c) if the location does not comply with the remote policy,

(C.4.c.1) disabling the apparatus.

32. The method of claim 31 further comprising:

(B.2) the remote agent providing an electronic notification to a law enforcement device; and

(C.4.c.2) the remote agent providing an electronic notification to the law enforcement device;

wherein the notifications to the law enforcement device include providing data identifying the location of the apparatus.

33. The method of claim 32 wherein the notifications to the law enforcement device further include providing data gathered during the authentication of the user.

34. The method of claim 33 wherein the data comprises biometric input data.

35. The method of claim 31 further comprising:
(C.4.b.2) the remote agent registering the location of the apparatus.

36. The method of claim 31 wherein the local policy comprises determining whether the location is in compliance with a policy selected from the group comprising:
the location of the apparatus is within a predetermined area;
the location of the apparatus is less than a predetermined distance from a prior location; and
the location of the apparatus is a pre-approved location.

37. The method of claim 31 wherein the local policy comprises determining whether the location is in compliance with a distance-based policy.

38. The method of claim 31 wherein the local policy comprises determining whether the location is in compliance with an area-based policy.

39. The method of claim 31 wherein the remote policy comprises determining whether the location is in compliance with a policy selected from the group comprising:

the location of the apparatus is within a predetermined area;
the location of the apparatus is less than a predetermined distance from a prior location;
the location has been pre-approved by a registered owner of the apparatus;
the location is an authorized repair facility for the apparatus;
all locations have been pre-approved until a first registration at a first location;
total motion of the apparatus since a predetermined time is less than a predetermined cumulative distance;
the apparatus has been moved fewer times than a predetermined number; and
the apparatus is within a non-export-controlled country;.

40. The method of claim 31 further comprising at least one of:
dynamically adjusting the local policy; and
dynamically adjusting the remote policy.

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41. A system comprising:
a communication link
an appliance including,
a functional unit;
10 means for dis/enabling the functional unit;
a location determination device;
a local policy enforcement device coupled to the communication link, to the means
for dis/enabling, and to the location determination device; and
a remote agent device including,
15 a registry adapted to store information regarding the apparatus; and
a remote policy enforcement device coupled to the communication link and to the
registry.

20 42. The system of claim 41 wherein the information includes location information.

43. The system of claim 42 wherein the appliance further includes a user authentication device
coupled to the local policy enforcement device.

25 44. The system of claim 43 wherein the information further includes user identification
information.

45. The system of claim 41 wherein the location determination device comprises a global
positioning system receiver.

30 46. The system of claim 41 wherein the location determination device comprises an
accelerometer.

47. The system of claim 41 wherein the local policy enforcement device comprises means for determining whether the appliance is in a location, determined by the location determination device, which location complies with a policy selected from the group comprising:

- the location of the appliance is within a predetermined area;
- the location of the appliance is less than a predetermined distance from a prior location; and
- the location of the appliance is a pre-approved location.

48. The system of claim 47 wherein the remote policy enforcement device comprises means for determining whether the location complies with a policy selected from the group comprising:

- the location of the appliance is within a predetermined area;
- the location of the appliance is less than a predetermined distance from a prior location;
- the location has been pre-approved by a registered owner of the appliance;
- the location is an authorized repair facility for the appliance;
- all locations have been pre-approved until a first registration at a first location;
- total motion of the appliance since a predetermined time is less than a predetermined cumulative distance;
- the appliance has been moved fewer times than a predetermined number; and
- the appliance is within a permitted country.

49. The system of claim 41 further comprising:
means for dynamically adjusting a local policy of the local policy enforcement device.

50. The system of claim 41 further comprising:
means for dynamically adjusting a remote policy of the remote policy enforcement device.

51. A method comprising:
an apparatus determining its location;
the apparatus determining whether the location complies with a local policy;
if the location complies with the local policy,
enabling the apparatus;

if the location does not comply with the local policy,
a remote device determining whether the location complies with a remote policy;
if the location complies with the remote policy,
enabling the apparatus,
5 if the location does not comply with the remote policy,
disabling the apparatus.

52. The method of claim 51 further comprising, if the location does not comply with the remote policy:

10 performing authentication of a user of the apparatus; and
if the user is authenticated,
enabling the apparatus.

53. The method of claim 52 further comprising, if the location complies with the remote policy:
15 the remote device registering information provided from the apparatus to the remote device.

54. The method of claim 53 wherein the information comprises information identifying the location.

20 55. The method of claim 52 further comprising, if the user is not authenticated:
the remote device sending a notification to a law enforcement device.

56. The method of claim 55 wherein the notification comprises an identification of the location of the apparatus.

25 57. The method of claim 56 wherein the notification further comprises information gathered during the authentication of the user.

58. The method of claim 57 wherein the information comprises biometric input data.

30 59. The method of claim 51 further comprising:

the apparatus dynamically adjusting the local policy.

60. The method of claim 59 further comprising:
the remote device dynamically adjusting the remote policy.

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61. In an apparatus which includes a functional unit, an improvement comprising:
means for disabling the functional unit;
means for identifying a location of the apparatus;
means for checking the location against a local policy, and for causing the means for
10 disabling to enable the functional unit if the location complies with the local policy and for causing
the means for disabling to disable the functional unit if the location does not comply with the local
policy.

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62. In the apparatus of claim 61, the improvement further comprising:
means for authenticating a user of the apparatus; and
the means for checking further for causing the means for disabling to enable the functional
unit if the user is authentic, and for causing the means for disabling to disable the functional unit if
the user is not authentic.

63. In the apparatus of claim 61 for use with a remote agent which checks the location against a
remote policy, the improvement further comprising:
means for communicating with the remote agent; and
the means for checking further for causing the means for disabling to enable the functional
unit if the remote agent indicates that the location complies with the remote policy, and for causing
25 the means for disabling to disable the functional unit if the remote agent indicates that the location
does not comply with the remote policy.

64. In the apparatus of claim 63, the improvement further comprising:
means for authenticating a user of the apparatus; and

